SHEET 1 - FEEDBACK

DECONSTRUCTION – RECONSTRUCTION OF THE TOULON NAUTICAL ECOBASE – LAND COMPONENT

Integration of the circular economy in the program and competition phase

Objective

Capitalization on the circular economy approaches undertaken in the project

Project phasing

Programming: July 2022 - 2024
Competition: Launch April 2024
Start of design: Summer 2025
Estimated delivery: 2028 / 2029

Phases covered by the REX sheet

Project members

Project owner: City of Toulon
AMO feasibility and programming study: SAGEM, ICE Philippe Pissarello, Easy Nautique, Agence AEI, GMCD, GEOTERRIA, ICTP

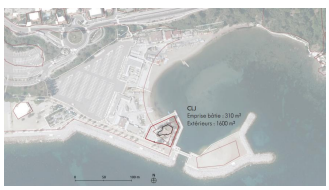
1 Description of the operation

The project is located on the fourth cove, called Anse Tabarly, the largest in the Mourillon seaside park in Toulon. Located in the heart of the city, the current nautical base is located on a site with high potential (quality of the available surfaces, services and accessibility of a pool suitable for learning water sports) but whose dilapidated facilities and the vulnerability of certain buildings are detrimental to the nautical offer and the quality of the reception and activities.
Faced with this observation, the City of Toulon wanted to rethink the nautical base in its entirety, including the removal of the prefabricated modules, the youth leisure center (CLJ) and all the nautical equipment that no longer allows for quality practice. The aim is to create a new nautical base, adapted to current practices and integrating a sea ecobase.
The operation involves a global reflection on the future establishment of the nautical base and on the public spaces adjoining the building: pedestrian paths, landscaping, parking, beach. The objective is to consolidate the synergy of the different occupants of the nautical base with a view to increasing the quality of activities with strong dynamics. The project must bring added landscape, architectural and environmental value through the redevelopment of the entire site.

The main issues:

- Open the 4th cove to the Toulonnais with views of the sea;
- To be a strong marker of the Mourillon beaches;
- Respect the recommendations of the environmental authority;
- Look for the best harmony in terms of space planning.





2 The place of the circular economy

Goals

The city of Toulon was selected following the call for expressions of interest from the Provence Alpes Côte d'Azur Region as part of the LIFE IP SMART WASTE project **, and was able to benefit from support for the integration of the circular economy into construction operations and markets, set up between 2020 and 2024, with specific monitoring of the Ecobase Nautique operation from the end of 2023.** It was during this support that the Project Owner wanted this project to be exemplary from an environmental perspective, both in the main principles chosen for urban integration and in the requirements concerning the implementation of construction and public spaces. It was therefore supported from the start of the project by an AMO which enabled the inclusion of various environmental objectives in the program:

- Strengthening sorting at source and waste management based on the PEMD diagnosis carried out upstream by the ICTP AMO, to enable the project owner to consider the on-site reuse of certain equipment (network elements, WEEE, exterior fittings and furniture) and ultimately, their recovery, avoiding as much as possible their storage as ultimate waste;
- Consideration of reuse via transitional urban planning of the nautical base during the construction phase;
- The realization of sourcing by the MOE, of materials and equipment from reuse, recycling and bio and geosourced materials in the proposed project;
- The implementation of the Mediterranean Sustainable Buildings approach with a minimum bronze label, which implies the designation of an environmental representative to guarantee the approach.

The involvement of the project owner

In the scenario development phase

- Discussion on environmental ambitions and circular economy
- Case-by-case study and hydraulic study to define the limits of the project

In programming phase

- Support by a Circular Economy AMO
- Carrying out a PEMD diagnosis of buildings to be deconstructed
- Registration of quantified objectives and skills clauses in the program

Market parts	Examples of inserted clauses
Project Program – General	” In order to reduce the cost of processing construction site demolition waste, the objective is to strengthen sorting at source and waste management to enable the project owner to consider reusing it on site. Ultimately, this will also strengthen its recovery, avoiding as much as possible its storage as final waste." "However, since this [building] is made of traditional materials, the MOE will have to consider whether or not to conserve some of its materials. The objective to pursue is to reduce waste production." "The quantity of matter and materials from the deconstructions represents a wealth of resources that the Project Owner wishes to be able to exploit in the project."
Project program – Focus on reuse	"[It is] also up to the project management group to consider possible recovery of materials, products or equipment of interest for reuse, in the project, in exterior developments or ex-situ on other operations." “ However, current equipment and furniture may be integrated into the design for reuse in the project, subject to their state of conservation and their compliance with current regulations.” “Failing this, or in addition, materials that the project manager has also sourced from other deconstruction projects or digital platforms may be integrated into the project design.”

Market parts	Examples of inserted clauses
Project program – Materials focus	"The objective will be to select environmentally friendly products (recycled, recyclable, bio-sourced). Life cycle analysis will be used to validate the performance of each material. When making decisions, the environmental factor must be integrated in the same way as price and quality."
Project program – Materials focus	"It will therefore be up to the project manager to monitor and justify the selection of materials by carrying out a life cycle analysis. At the end of the project, an update of the overall life cycle analysis of the building will be expected, highlighting the improvement in environmental performance following the various decisions on materials."
Project program – Low environmental impact charter	"As part of the project, compliance with best practices in terms of planning and site management will be expected. The site will have to reduce nuisances in its immediate environment, whether olfactory, noise or visual. A limitation of impacts in the long term will also be expected by seeking efficient recovery channels for site waste." This charter will be sent to the project owner for validation and must cover the following themes: […] 2. Waste management. This charter will require: - Submit a monthly log of all construction waste. It is expected that more than 75% of construction waste will be recovered. Material recovery will be at give priority (the production of biogas will not be considered as a recovery sector); - Limit waste production by searching for precise layouts and using prefabricated materials wherever possible; o Maintain an up-to-date site installation plan with the position of the sorting bins; o Regularly train work teams on the sorting implemented. The workers will be informed by a display of the performance achieved on the project in terms of waste recovery.

In competition phase

- Analysis of offers from the perspective of the circular economy by the Circular Economy AMO

Levers and success factors

- The commitment and ambitions of the project owner in terms of the environment and circular economy;
- Request for multidisciplinary skills in the project management group to ensure the implementation of the requirements;
- Take the time to study all the parameters and discuss with all the stakeholders (DREAL, DDTM, elected officials, etc.)
- The establishment of quantified objectives from the programming stage.

Brakes identified

- The number of parameters to be taken into account in large projects reduces the place of the circular economy;
- Legal issues in reuse operations.

Financial aspects

- Project estimated at 9 million euros, of which 14% is dedicated to project management + additional missions